



#### Introductions

- Jason Tremblay, PE
  - NHDOT Bureau of Bridge Design
    - Senior Project Engineer
- Joseph Johnson, PE, PTOE
  - Greenman-Pedersen, Inc.
    - Project Consultant









- Bridge Maintenance and Preservation
  - Extend the useful life of the bridges
  - Replace bridge expansion joints
  - Replace pavement
  - Repair bridge piers
  - Patch deck





Replace Expansion Joints









Replace Pavement







Repair Piers

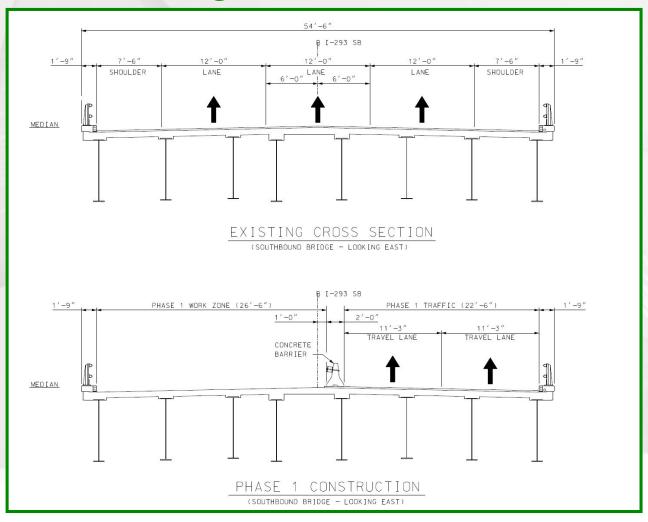








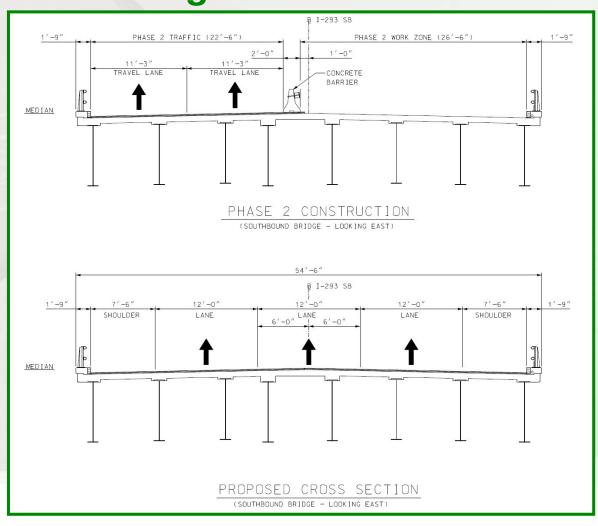
# **Bedford-Manchester 40731 Bridge Cross Section**







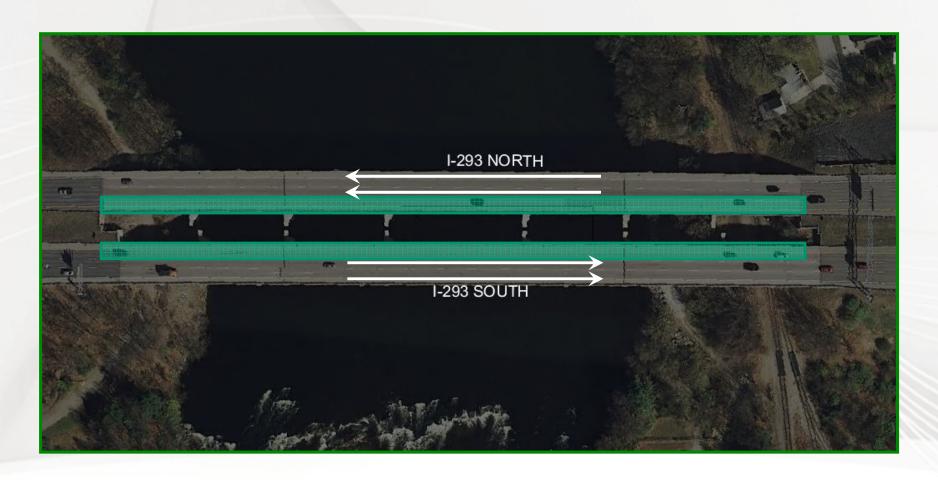
# **Bedford-Manchester 40731 Bridge Cross Section**







#### Phase 1 – Work Zone





#### Phase 1 – West Side Ramps





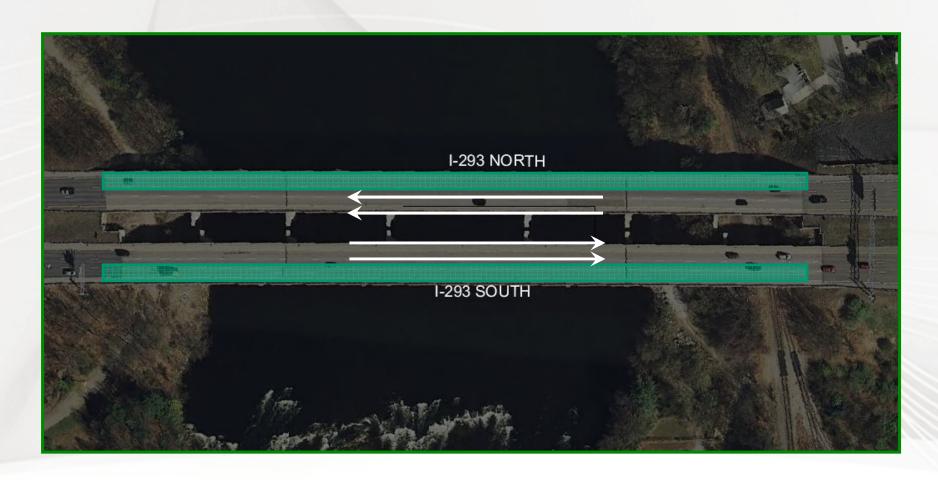


#### Phase 1 – Brown Avenue Ramps





#### Phase 2 – Work Zone





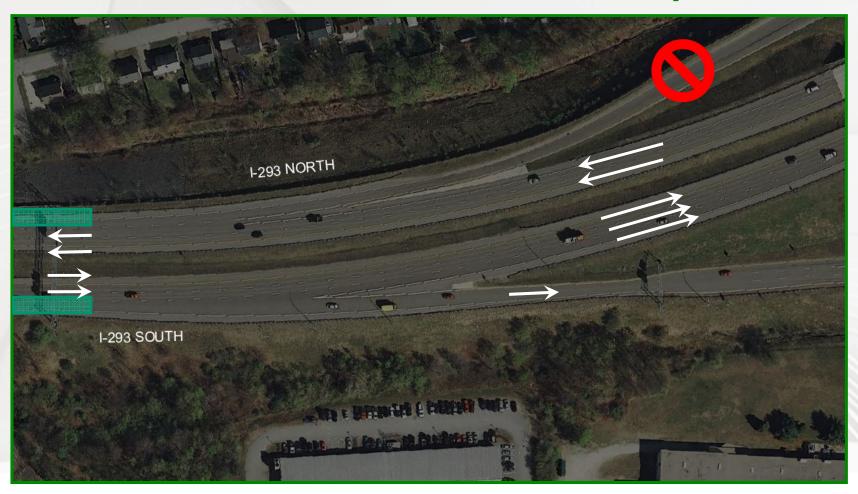
#### Phase 2 – West Side Ramps





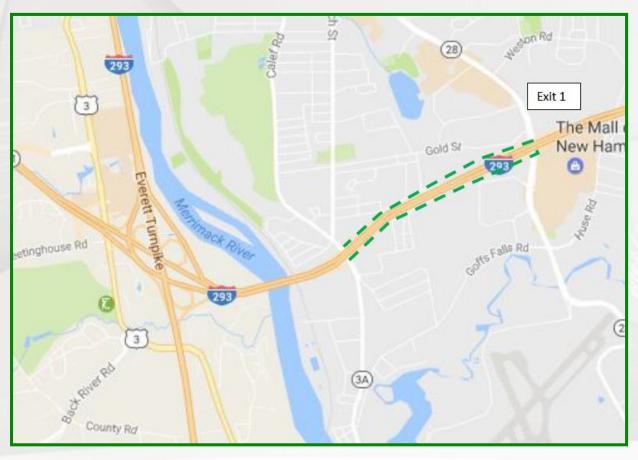


#### Phase 2 – Brown Avenue Ramps





#### **Brown Ave Detour**





## **Traffic Mitigation Efforts**

- Smart Work Zone technology
  - Traffic monitoring and delay information
- Advanced signing and message boards
- Local user knowledge
  - Alternative routing
  - Waze, Google Maps, etc.
- Field adjustment of timings at Exit 1



## **Project Schedule**

- Advertise for bids January 2018
- Phase 1 Spring 2018
  - Traffic shifted right
  - 2 to 2.5 month duration
- Phase 2 Summer 2018
  - Traffic shifted left
  - -2 to 2.5 month duration
- Completion Fall 2018



